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APPLICATION NUMBER: 60/416,684

FILING DATE: October 07, 2002

RELATED PCT APPLICATION NUMBER: PCT/US03/31608



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PROVISIONAL APPLICATION FOR PATENT COVER SHEET This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
George C. Georgia L.		Konstantakis Konstantakis		7969 S. Forest Meadows Dr., Franklin, WI 53132 7969 S. Forest Meadows Dr., Franklin, WI 53132	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
ACCESS-LIMITING DOOR LEVER STOPPER					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number		26710		<div> <div>Place Barcode Here</div>  <div>26710</div> </div>	
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages		4		<input type="checkbox"/> CD(s), Number	
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets		5		<input checked="" type="checkbox"/> Other (specify)	
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76				Return Postcard	
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.				FILING FEE AMOUNT (\$)	
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees					
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:		17-0055		\$80.00	
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are _____					

Respectfully submitted,

Date 10/ 07 / 02

SIGNATURE

TYPED or PRINTED NAME Keith M. Baxter

TELEPHONE 414.277.5719

REGISTRATION NO.
(if appropriate)
Docket Number:

31,233

550637.90018

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

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FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 80.00

Complete if Known

Application Number 60/
Filing Date October 7, 2002
First Named Inventor George C. Konstantakis
Examiner Name
Group Art Unit
Attorney Docket No 550637.90018

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account

Deposit Account Number 17-0055

Deposit Account Name Quarles & Brady LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1001	740	Utility filing fee	
		1002	330	Design filing fee	
		1003	510	Plant filing fee	
		1004	740	Reissue filing fee	
		1005	160	Provisional filing fee	80.00

SUBTOTAL (1) (\$ 80.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	= 0.00
Multiple Dependent Claims	-3*** =	X	= 0.00

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1202	18	Claims in excess of 20	
		1201	84	Independent claims in excess of 3	
		1203	280	Multiple dependent claim, if not paid	
		1204	84	** Reissue independent claims over original patent	
		1205	18	** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$ 0.00

**or number previously paid, if greater, For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1051	130	2050 65 Surcharge - late filing fee or oath	
		1052	50	2052 25 Surcharge - late provisional filing fee or cover sheet	
		1053	130	1053 130 Non-English specification	
		1812	2,520	1812 2,520 For filing a request for ex parte reexamination	
		1804	920	1804 920* Requesting publication of SIR prior to Examiner action	
		1805	1,840	1805 1,840* Requesting publication of SIR after Examiner action	
		1251	110	2251 55 Extension for reply within first month	
		1252	400	2252 200 Extension for reply within second month	
		1253	920	2253 480 Extension for reply within third month	
		1254	1,440	2254 720 Extension for reply within fourth month	
		1255	1,960	2255 980 Extension for reply within fifth month	
		1401	320	2401 160 Notice of Appeal	
		1402	320	2402 160 Filing a brief in support of an appeal	
		1403	280	2403 140 Request for oral hearing	
		1451	1,510	1451 1,510 Petition to institute a public use proceeding	
		1452	110	2452 55 Petition to revive - unavoidable	
		1453	1,280	2453 640 Petition to revive - unintentional	
		1501	1,280	2501 640 Utility issue fee (or reissue)	
		1502	460	2502 230 Design issue fee	
		1503	620	2503 310 Plant issue fee	
		1460	130	1460 130 Petitions to the Commissioner	
		1807	50	1807 50 Processing fee under 37 CFR 1 17(q)	
		1808	180	1808 180 Submission of Information Disclosure Sum	
		8021	40	8021 40 Recording each patent assignment per property (times number of properties)	
		1809	740	2809 370 Filing a submission after final rejection (37 CFR § 1 129(a))	
		1810	740	2810 370 For each additional invention to be examined (37 CFR § 1.129(b))	
		1801	740	2801 370 Request for Continued Examination (RCE)	
		1802	900	1802 900 Request for expedited examination of a design application	
Other fee (specify)					
**Reduced by Basic Filing Fee Paid					
SUBTOTAL (3)					(\$ 0.00

SUBMITTED BY

Name (Print/Type) Keith M. Baxter

Signature

Registration No (Attorney/Agent) 31,233

Complete (if applicable)

Telephone 414.277.5719

Date October 7, 2002

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Title of Invention: Access-Limiting Door Lever Stopper
Date of Invention:
Inventor(s): George C. Konstantakis and Georgia L. Konstantakis
7969 S. Forest Meadows Drive
Franklin, Wisconsin 53132
U.S.
Citizenship:
Cross- References to
Related Application: Unknown

I. Abstract

An access-limiting door lever stopper includes two parts; a downward stopper and an upward stopper. This invention is symmetrical and will work for both left-handed and right-handed hinged doors. This invention works in application by capturing an existing door lever and limiting rotation by using the existing door stop. With the device installed and the door closed, if the lever is rotated in either direction, a jamb post on either the downward stopper or the upward stopper will engage the door stop resisting further rotation. An operator of sufficient means may open the door when rotating the door lever upward.

II. Background of Invention

If small children or the mentally infirmed are allowed to open a door and to exit from a secure area by turning the door lever a potential danger to their well-being arises. This device is primarily used to prevent children from access to and from certain rooms in a home.

Accordingly, there exists today a need for a removable door lever stopper that is easy to apply and remove by a caregiver and yet is difficult to remove by the person for whom access is to be restricted. Clearly, such an apparatus is a useful and desirable device.

As far as the Applicant is aware door lever stoppers have not been achieved in the past, however, rotary knob covers are, in general, known.

III. Object of the Invention

An adult parent may wish to keep certain rooms, closets, or cabinets in the home off limits. Child fatalities resulting from toilet bowl drowning, ingestion of poisons or overdoses of other substances are common enough to take adequate precautions to prevent children from access to contents of certain rooms.

It is an object of the present invention to provide a door lever stopper which is simple in construction and has a minimum of moving parts but which, at the same time, requires consecutive actions which are beyond the capability of a child.

IV. Brief Description of the Drawings

An embodiment of the invention is described below depicting a right-handed door situation with reference to the accompanying drawings, in which:

FIG. 1 is a top view of the assembly including a lever 20, door 14 cutaway, door stop 18 cutaway, and a door jamb 16 cutaway for reference;

FIG. 2 is a front view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 3 is a right projection view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 4 is an isometric view of the assembly including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 5 is a top isometric view of the downward stopper;

FIG. 6 is a bottom isometric view of the downward stopper;

FIG. 7 is a top isometric view of the upward stopper;

FIG. 8 is a bottom isometric view of the upward stopper;

FIG. 9 is an exploded isometric view of the downward stopper and lever in initial assembly orientation for reference;

FIG. 10 is an exploded isometric view of the assembly including a lever for reference;

FIG. 11 is a front view of the assembly in a downward locked condition including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 12 is a front view of the assembly in an upward locked condition including a lever, door cutaway, door stop cutaway, and a door jamb cutaway for reference;

FIG. 13 is a rendered isometric view of the assembly installed on a right-handed door including a lever for reference.

FIG. 14 is a rendered isometric view of the assembly installed on a left-handed door including a lever for reference.

V. Detailed Description of the Invention

According to the invention an access-limiting door lever stopper includes a downward stopper 12 and an upward stopper 10. When installed over an existing lever 20, this invention will limit both clockwise and counterclockwise rotation of a door lever 20 with the intent of limiting the ability of the door 14 to which the lever is attached to be opened. Both components of this invention are symmetrical, and will work for both left-handed (FIG. 14) and right-handed (FIG. 13) doors.

FIG. 5 and FIG. 6 include details of the downward stopper 12; two rotation-limiting cylinders 22, one on either side, a lever post 24, a jamb post 26, and a lever hub rest 28.

FIG. 7 and FIG. 8 include details of the upward stopper 10; two finger tabs 30, one on either side, a lever post 32, a jamb post 34, two flexible lever hub retaining ears 36, one on either side, two rotation-limiting slots 38, one on either side, and a center recess 40.

For installation, with the door open and the lever 20 rotated upward so as to be approximately perpendicular to the floor as shown in FIG. 9, the downward stopper 12 is placed over the hub 44 such that the hub rest 28 comes into contact with it, and the lever is allowed to return to its preloaded state as shown in Figure 10, placing the downward stopper in a captured position. The upward stopper 10, which is recessed 40 so as to accommodate the downward stopper geometry, is then placed over the downward stopper, and the slots 38 in the upward stopper snap around the cylinders 22 in the downward stopper. With the two components assembled, the door may be closed. The operator may have to temporarily rotate the lever so as to allow the door to be closed. When the door has been closed, the invention will be in its operating state.

In its operating state, as depicted by FIG. 11, the door lever 20 has a downward preload that forces the downward stopper to engage the door stop 18. As the door lever is rotated downward, the underside 42 of the lever engages the downward stopper's lever post 33 at the interface 50, causing the downward stopper to rotate in the same downward direction which in turn causes the downward stopper's jamb post 26 to engage the door stop 18 at the interface 48 resulting in resistance to further downward rotation. Likewise, as depicted by FIG. 12, as the door lever is rotated upward, the top side 44 of the lever engages the upward stopper's lever post 32 at the interface 54, causing the upward stopper to rotate in the same upward direction which in turn causes the upward stopper's jamb post 34 to engage the door stop 18 resulting in resistance to further upward rotation.

When an operator of sufficient means wishes to open the door, they do so by using the forefinger and thumb to press together the finger tabs 30 of the upward stopper, lift and disengage the upward stopper. The lever is then free to rotate upwards so as to allow the door to be opened. Also, the interface between the upward stopper and the lever hub 44 is such that an operator of sufficient means may provide enough torque when rotating the door lever upward to force the retaining ears 36 to flex and allow the upper stopper to lift off of the lever hub so that the lever is allowed to rotate upward enough to allow the door to be opened.

There are two methods of use of this invention. The preferred is to use both the upward and downward stoppers as described above. However, if one wishes not to use the upward stopper, the downward stopper alone will resist downward rotation only, leaving upward rotation unrestrained.

The lever posts and jamb posts of both the upward and downward stoppers are of appropriate geometry to contact all necessary points on the door, door stop and lever providing added stability when stationary or when in operation.

The preferred embodiments of both the upward stopper and the downward stopper are depicted by the rendered images of FIG. 13 and FIG. 14 showing the aesthetic curves and contours of the design. The approximate dimensions of the components are also depicted in FIG. 13 making this invention suitable for any lever-operated, hinged cabinet doors or room doors a home. The preferred materials would be plastics; nylon, polypropylene families or similar.

VI. Claims

1. An access-limiting door lever stopper for existing door lever assembled to existing door assembly requires no disassembly or modification of existing door hardware.
2. The access-limiting door lever stopper in claim 1 which includes a downward stopper and an upward stopper.
3. The access-limiting door lever stopper in claim 1 which is symmetrical and will work for both left-handed and right handed doors as well as inward and outward opening doors.
4. The access-limiting door lever stopper in claim 1 which works in application by capturing an existing door lever and limiting rotation by using the existing door stop.
5. The access-limiting door lever stopper in claim 1 in which an operator of sufficient means may open the door.
6. The access-limiting door lever stopper in claim 1 less the upward stopper which will resist downward rotation only, leaving upward rotation unrestrained.
7. The access-limiting door lever stopper in claim 1 in which the lever posts and jamb posts of both the upper and downward stoppers are of appropriate geometry to contact all necessary points on the door, door stop and door jamb providing added stability when stationary or when in operation.

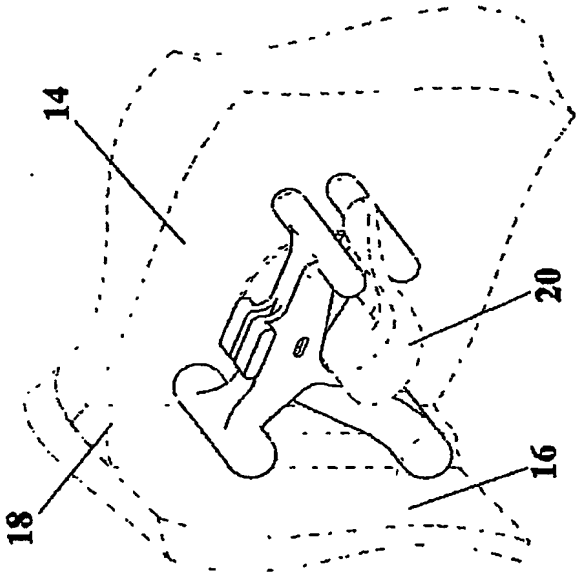


FIG. 4

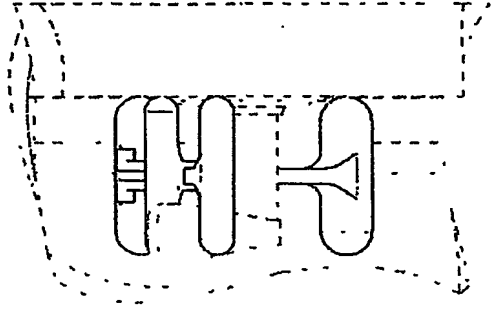


FIG. 3

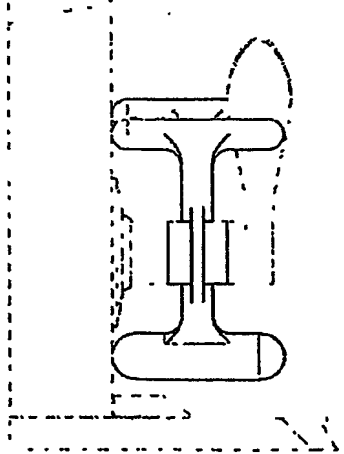


FIG. 1

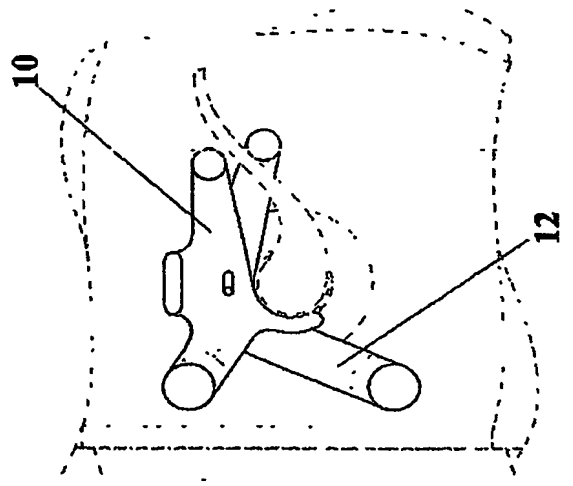


FIG. 2

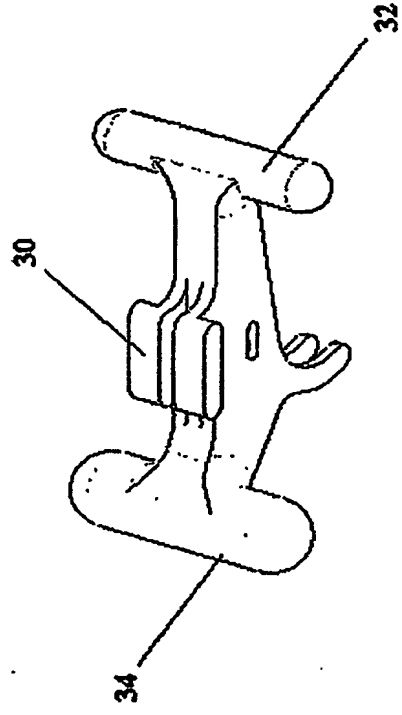


FIG. 7

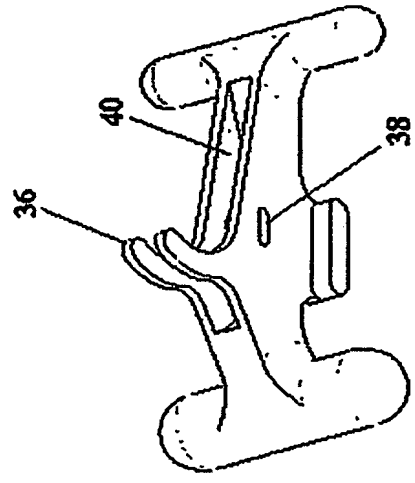


FIG. 8

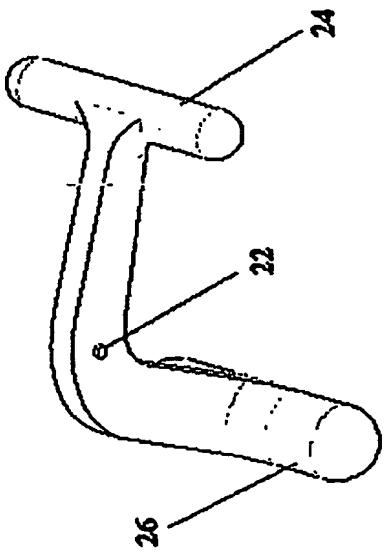


FIG. 5

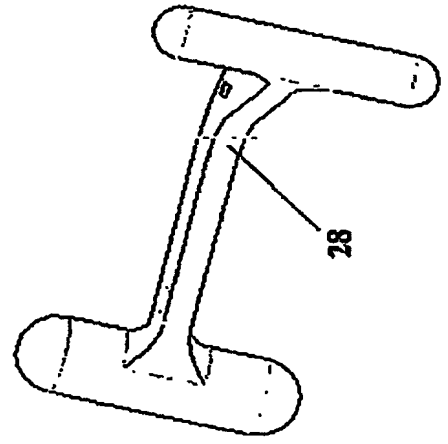


FIG. 6

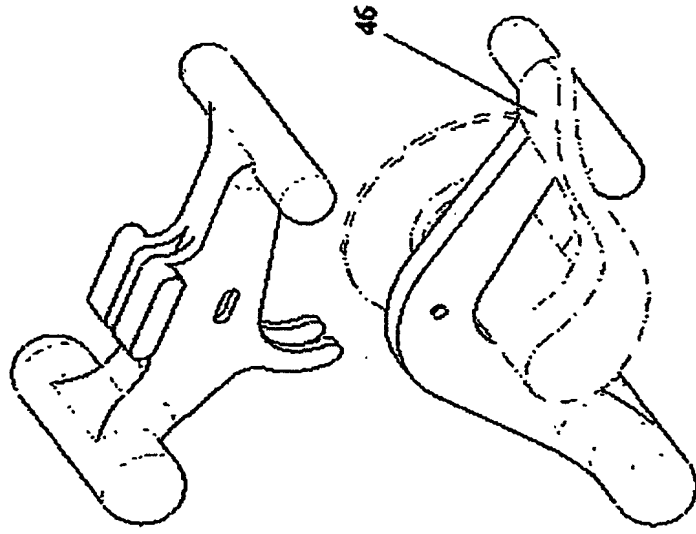


FIG. 10

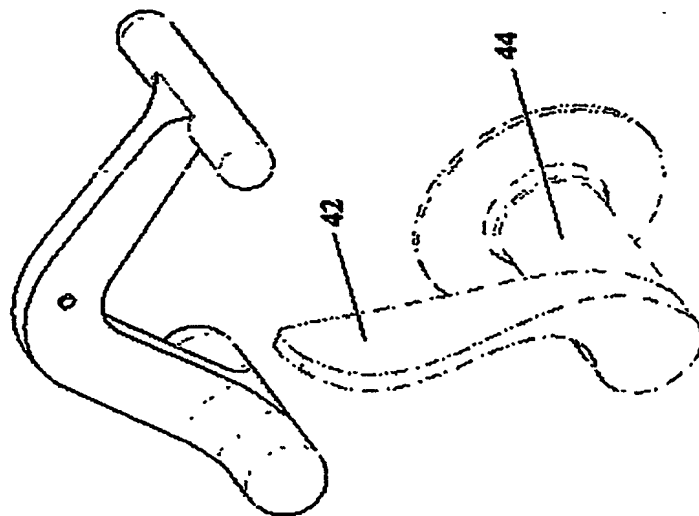


FIG. 9

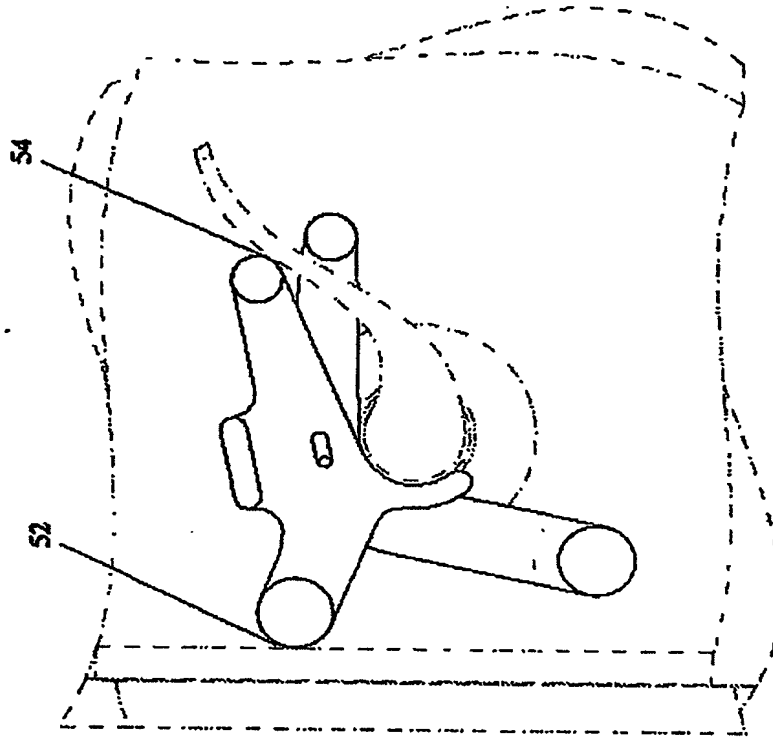


FIG. 12

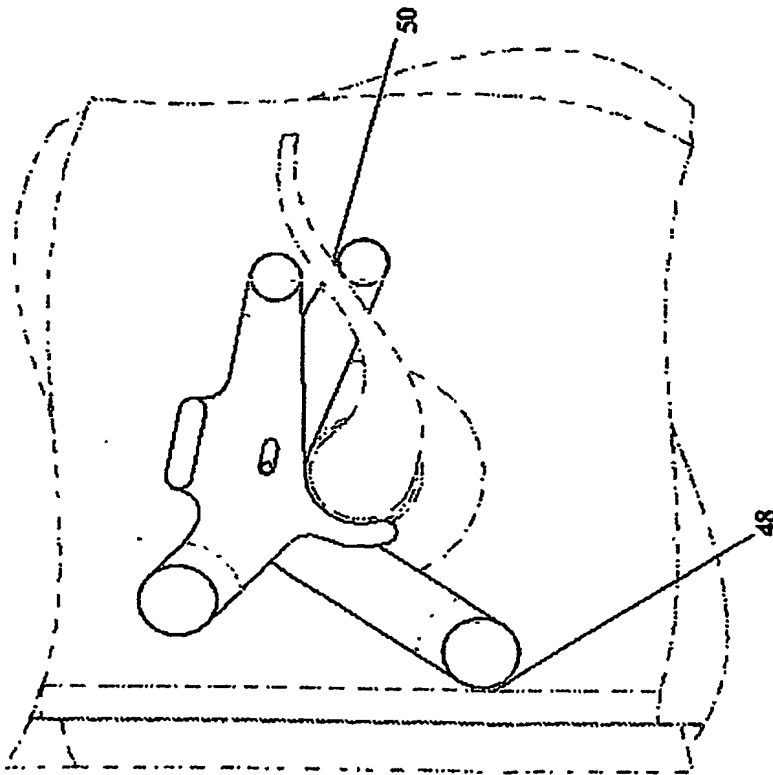


FIG. 11

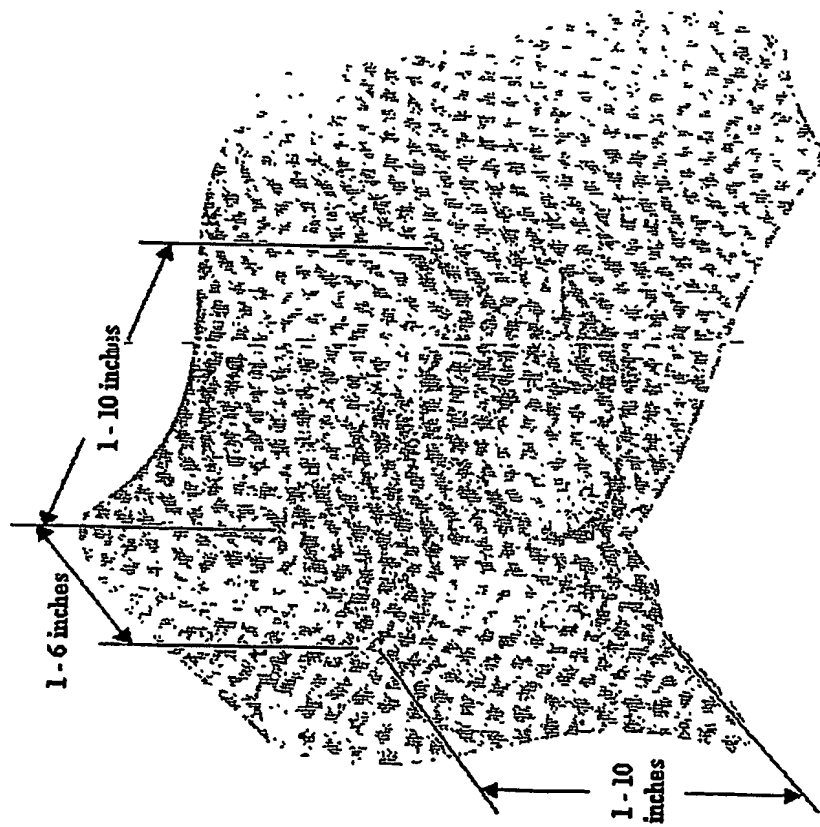


FIG. 13

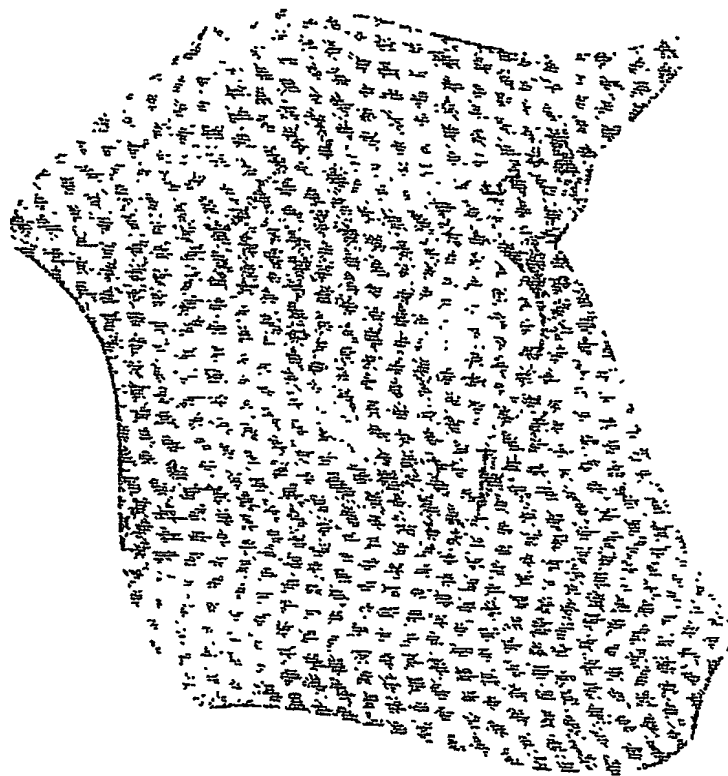


FIG. 14

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